l: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

The inconſtancy of the ſummer weather not only occaſions the unfruitfulneſs of the land, but is likewiſe a great hindrance to the people in preparing their fiſh againſt the winter; ſo that, although there is vaſt plenty of fiſh, they are not able to prepare ſo much as to prevent a ſcarcity before the winter is over; nor can they preſerve one fiſh out of ten which they hang up to dry, the continual wet breeding worms which conſume it; ſo that the fiſh which the dogs and bears catch themſelves and lay up, ſells very dear in the ſpring.

In the more diſtant places from the ſea, and eſpecially about the upper *Kamtſchatka Oſtrog*, the weather is very different; it being fine and clear from the month of *April* to the middle of *June*. The rains begin after the ſummer ſolſtice, and continue to the end of *Auguſt*. Deep ſnows fall in the winter; but high winds ſeldom happen, and, when they do, are but of ſhort continuance: and although there does not, perhaps, fall more ſnow than upon the Great River, yet it is deeper, as it lies lighter.

The harveſt weather is generally agreeable and clear, except at the end of *September*, when ſtorms frequently happen. The rivers are generally frozen over in the beginning of *November*; for their ſwift current prevents their freezing in moderate froſts. Upon the *Penſchinſka* ſea the winds are generally in the ſpring ſouth-ſouth-eaſt and ſouth-weſt; in the ſummer, weſt; in the autumn, north and north-eaſt; in the winter before the ſolſtice, uncertain; but after that, to the month of *March*, the north-eaſt and eaſt winds prevail. From theſe winds the ſpring and ſummer, before the ſolſtice, are generally thick and heavy; but the weather in the months of *September*, *October*, *February*, and *March*, is more agreeable, and is the time for trade and long journies. In *November*, *December*, and *January*, there is little clear good weather, but heavy ſnows and great drifts, which in *Siberia* they call *Pourgami*. The eaſt and ſouth-eaſt winds blow long and moſt violently, ſometimes for two days together, and with ſuch vehemence, that

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

237 262 those made of timber, in that they are much lighter and go ſwifter. Of the ſeals' fat both *Ruſſians* and *Kamtſchadales* make candles; and beſides the natives eſteem it ſuch a delicacy that 251 they can have no feaſt without it. The fleſh they boil or dry in the ſun; but if there are great quantities, they ſmoke or bake it in the following manner: They dig a large pit in proportion to the quantity of fleſh or fat, and pave the bottom with ſtones. Then they fill it with wood and light it below, continuing to add fuel until it be as hot as any oven. After which they take out all the aſhes, then lay at the bottom a layer of green poplar wood, upon this another of ſeals' fleſh or fat, each ſeparately; and thus alternately wood and fleſh until the pit be quite full. They then cover it with graſs and earth, to keep in the heat; and after ſome hours they uncover it, take out the fat and fleſh, and lay it up for the winter. Both fleſh and fat thus prepared is much more delicate than what is boiled; beſides, it keeps without ſpoiling for a whole year.

825 796 782 When they have picked all the fleſh from the heads of the ſeals they ſhew them all the reſpect that they would to a particular friend that viſits them. I ſaw this ceremony in the year 1740 at the little fort of *Krodakighe*, which ſtands upon a river of the ſame name that falls into the Eaſtern Ocean. It was performed in the following manner: They brought in the ſkull or head of a ſeal, bound round with the ſweet graſs, and placed it upon the floor. Then a *Kamtſchadale* entered with a bag filled with the ſweet herbs and others, particularly a good deal of birch bark, and placed it near the head; upon which two other *Kamtſchadales* rolled in a great ſtone, and ſet it oppoſite to the entry of the hut, about which they laid ſeveral ſtones; and two others tore the ſweet herbs, and made it into ſmall bunches. The great ſtone was to ſignify the ſea, the ſmaller the waves, and the bunches of the ſweet herb the ſeals. This being done, they took three diſhes of caviar mixed with kipre, hurtleberries, and ſeals'

fat

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

136 greatly: this obſervation probably holds in all kinds of ſalmon
137 trouts. In the fourth year alſo, the lower part to the ſnout be-
251 comes hooked. This ſpecies of fiſh ſwims along with the gor-
buſhe, and is caught with it in the ſame net, which is wove of ſmall yarn, the meſhes being about an inch wide. Such as live in the rivers are nouriſhed by the roes of other fiſh; and in the ſummer are found near the heads of ſmall rivers, which they leave in the ſpring. Such as are caught at the beginning of ſummer are ſalted, but thoſe caught later are frozen for the winter.

136 Another ſpecies of fiſh is called muikiſi, and is about the bigneſs of the narka; its ſcales are pretty large; its head is of a middling ſize; the upper part of its ſnout is like that of the goltſa, with the lower part hooked; it has teeth in its jaws and on the ſide of the tongue; its back is blackiſh, marked with round, or ſemicircular black ſpots; and upon each ſide has a large red ſtripe, which goes quite from the head to the tail: this diſtinguiſhes it from all the other ſpecies of this fiſh: it ſwallows all kinds of naſtineſs, and often catches the field mice that happen to ſwim upon the river; and is ſo particularly fond of the nortleberry, that if it ſees any growing upon the bank, it throws itſelf out, and ſeizes either the berry or the leaf of the plant. It is a well taſted fiſh, but is not caught in ſuch plenty as others are. They do not certainly know the time of its entering the rivers, but imagine it is before the ice is gone.

There is a third kind called kunſha, which is about three feet long; the head makes a ſeventh part of the length; the ſnout is ſhort and ſharp; its jaws are furniſhed with teeth; its back and ſides blackiſh, marked with yellow ſpots, ſome of which are round and others oblong; its belly is white; its lower fins and tail blue; and the fleſh white and well taſted. In *Ochotſka* it ſwims in ſhoals, but at *Kamtſchatka* it is more rare, and conſequently more eſteemed.

1. [Goltza] The

l: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

CHAP. XI.

Of INSECTS.

136
251

AS *Kamtſchatka* abounds with lakes and marſhes, the ſwarms of inſects in the ſummer time would make life intolerable there, if it were not for the frequent winds and rains. The maggots are ſo numerous as to occaſion great deſtruction to their proviſions, particularly in the time of preparing their fiſh, which are ſometimes entirely deſtroyed by them. In the months of *June*, *July*, and *Auguſt*, when the weather happens to be fine, the muſketoes and ſmall gnats are very troubleſome; however the inhabitants do not ſuffer much from them, as they are at that time, upon account of the fiſhery, out at ſea, where by reaſon of the cold and wind few of theſe inſects are to be met with.

136 It is but lately that bugs appeared upon the river *Awatſcha*, which were brought thither in cheſts and cloaths: they are not yet known in *Kamtſchatka*. Upon account of the wet weather and ſtorms few of the butterfly kind are found here, except in ſome woods near the upper *Kamtſchatkoi* fort, where they abound. It has been obſerved that numbers of theſe inſects have ſettled upon veſſels which were 30 verſts from the ſhore: it appears ſomewhat extraordinary that they ſhould be able to fly to ſuch a diſtance without reſting; moſt likely the ſtorms ſo frequent here might drive them out to ſea, and by their violence ſupport them.

136 There are few ſpiders in *Kamtſchatka*; ſo that the women
825 who are fond of having children, and who have a notion that
842 theſe inſects ſwallowed render them fruitful and their labour eaſy, have great trouble to find them. Nothing plagues the natives

1: Krasheninnikov N-5 (1736-40) 1764 Kamchadal

343 to ſuffocate any one who is not inured to bear it: but the
447 natives find no difficulty in going out or in; and though they
626 can only fix their toes on the ſteps of the ladder, they mount like ſquirrels; nor do the women heſitate to go through this ſmoke with their children upon their ſhoulders; though there is another opening through which the women are allowed to paſs; but if any man ſhould pretend to do the ſame he would be
342 laughed at. The *Kamtſchadales* live in theſe huts all the winter, after which they go out into others which they call balagans: theſe ſerve them not only to live in during the ſummer, but alſo for magazines. They are made in the following manner: Nine pillars, about two fathom long or more, are fixed in the ground, and bound together with balks laid over them, which they cover with rods, and over all lay graſs, faſtening ſpars and a round ſharp roof at top, which they cover with bramble, and thatch with graſs. They faſten the lower ends of the ſpars to the balks with ropes and thongs, and have a door on each ſide one directly oppoſite to the other.

342 They have ſuch balagans, not only round their winter habita-
251 taions, but alſo in thoſe places where they lay up their food in ſummer; and they are certainly very convenient in this country on account of the frequent rains, which would ſurely ſpoil all their fiſh if it was not preſerved in ſuch places; beſides, when they return from fiſhing and hunting in the harveſt, they leave their dry fiſh here, 'till they can fetch it in the winter; and this without any guard only taking away the ladders. If theſe buildings were not ſo high the wild beaſts would undoubtedly plunder them; for notwithſtanding all their precaution, the bears ſometimes climb up and force their way into their magazines, eſpecially in the harveſt when the fiſh and berries begin to grow
343 ſcarce. In the ſummer, when they go a hunting, they have, beſides their balagans, huts made of graſs, in which they dreſs their

5: Jochelson A-5 (1910-11) 1928 Kamchacal

226 hunting the wild Kamchatka variety of reindeer. Fish, different species of salmon, ascend the Kamchatka rivers in such abundance that they amply satisfy the needs
● 251 in food. The Kamchadal have no time during the short fishing season to dry or smoke all the fish for the winter and the greater part of it is put in holes covered with stones and earth, and during the winter it is consumed in a decayed state by dogs as well as by men.

225 To a certain degree the Kamchadal of the western coast hunt sea mammals,
501 but, not having skin boats, they do not go out to the sea, but kill those seals, white whales (*Delphinopterus leucas*) and sea lions (seldom) which enter the mouths of rivers in order to catch the ascending fish. Thong nets are put up for that purpose. They also kill seals, spearing and shooting them at their rookeries.

231 Horned cattle and horses were imported into Kamchatka chiefly from the
492 Okhotsk district, i. e., of the Yakut race. In spite of the fact that they are badly cared for, they became acclimatized in Kamchatka and are a strong race of
177 domestic animals. The Kamchatka horses are small, short necked, wide breasted and with short legs. During the winter they become covered with long thick hair, particularly their legs. Horses are used only in summer—as riding and pack animals. During the winter they are set free and have to graze from under the snow; rarely are they given hay and they therefore turn wild and have to be captured in the summer and trained again for riding.

234 Cow's milk plays at present an important rôle in the food of the Kamchadal
372 and Russian inhabitants of the country. They use sweet as well as sour milk and pot cheese. Butter is rarely made, although the milk is rich in fat. But the Kamchatka cows give a small quantity of milk, about two or three quarts a day, as a result of scanty feeding in winter and of being kept in cold stalls. The Kamchadal make little hay, as the season for fishing and hay making coincide. One cow may be reckoned for every three inhabitants. The number of cattle may be estimated, according to the writer's census, at about 2,000.

177 Prior to the advent of the Russian the only domestic animal of the Kamchadal
231 was the driving dog. The Kamchadal dog was regarded as the best and biggest driving dog of Siberia; at present, as a result of unfavorable conditions of life, it has become small in size. The dogs work hard during the long winter, but during
492 the entire summer they are tied up, otherwise calves and colts and sometimes cows and horses are in danger of being torn by them. They are kept far from the village and poorly fed. Owing to the economic, climatic and topographic conditions of the country, the Kamchadal can not dispense with the driving dog, and every family has from eight to fifteen dogs. The number of dogs in 1911 in Kamchatka, according to my census, was more than 5,000. The old Kamchadal sledge for riding astride is no longer in use, the Russians having introduced the type of sledge used all over eastern Siberia. The dogs are harnessed to the sledge, being tied in pairs to a long thong.

There are no domesticated small animals, as goats or sheep and birds, in Kamchatka, as they would be exterminated by the ever hungry dogs, which very often find means to free themselves.

6:Antropova E-4 (no date) 1964 RY3 Kamchadal RY3

north to the Nalachevaya River in the south. The second included Itel'mens living from the Nalachevaya River to Cape Lopatka, as well as the "Near Kurilers." The third group consisted of the Itel'mens of the western coast of the Kamchatka Peninsula (Sedanka-Khayryuzovo). The greatest differences were between the languages of the northern and southern groups. Of the dialects of the Itel'men language, only two have survived to our time—the Khayruyuzovo and the Sedanka, which were strongly affected by Koryak and Russian.

The question of the origin of the Itel'mens remains open. The archeological remains on the peninsula have not been studied sufficiently. They are represented by semiunderground dwellings, which hold large quantities of neolithic stone implements: arrowheads, spears, hatchets, scrapers, blubber lamps, well-made bone objects and fragments of pottery. These are very close to the Itel'men implements of the 17th and 18th centuries. Similar stone and bone objects were found by the first explorers of Kamchatka—S. Krasheninnikov (1737-1742) and G. Steller (1740-44).

The first ethnographic data about the Itel'mens were provided by V. Atlasov, who made a journey to Kamchatka from the Anadyr' Fort in 1697, with a detachment of Cossacks and Yukagirs. Atlasov followed the western coast, almost to the southern tip of the peninsula, and collected the first fur-tax from the Itel'mens. He found the Itel'mens at the height of the neolithic technique in making stone and bone implements. His "tales" (reports) abound in ethnographic materials. They provide fairly detailed descriptions of the material culture (villages, dwellings, clothing, methods of preparing food, etc.), the geographic distribution, and individual features of clan organization. Especially interesting are Atlasov's data on pottery-making, for only 40 years later, S. Krasheninnikov found no traces of this occupation among the Itel'mens.

Economy, Daily Life and Social Relations

Thanks to the remarkable work of Stepan Krasheninnikov, a participant in Bering's Second Kamchatka Expedition, we have a detailed account of the material production and social order of the Itel'mens in the first half of the 18th century, when they still retained their original culture.

They were fishermen who lived in permanent settlements along rivers. Their largest concentration was in the basin of the Kamchatka River. The main fishing season was during the salmon-run, when the fish surged upstream in dense masses to spawn. They fished with nets and hooks.

Nets were woven of nettle fiber. Fish was cured, made into yukola, and pickled in pits. Fish-heads were always pickled; this was a favorite dish.

The second important occupation of the Itel'mens was hunting. Kamchatka at that time was very rich in meat and fur animals. But fur animals were also hunted primarily for meat, since there was no market for the furs. V. Atlasov reported that the Itel'mens mixed chopped sable tails with the clay when making clay utensils.

An important role in the Itel'men economy was played by sea hunting. They hunted seal, fur-seal, and sea-beaver. The southern Itel'mens also hunted whales with arrows poisoned with plant poison.

None of the northern Siberian peoples engaged as widely as the Itel'mens in gathering wild plants. Most important in their diet were the tubers of sarana (a local name for various members of the lily family), sweet grass stems, the leaves of arnica, various berries, cedar nuts, etc. Plant tubers were dug out with a special digging implement of deer horn, tied to a wooden

7:Lesseps T-3 (1787-88)1790 Kamchadal

417 retains its roundneſs, and preſents on one
576 ſide ſomething like ſteps, but they are ſo incommodious that I was more than once in danger of breaking my neck. In reality, whenever this vile ladder turns under the feet of thoſe who are not accuſtomed to it, it is impoſſible to preſerve an equilibrium; a fall muſt be the conſequence, more or leſs dangerous, in proportion to the height. When they wiſh perſons to be informed that there is nobody at home, they merely turn the ſtair-caſe, with the ſteps inward.

251 Motives of convenience may have ſuggeſted to theſe people the idea of building ſuch ſtrange dwellings, which their mode of living renders neceſſary and commodious. Their principal food being dried fiſh, which is alſo the nouriſhment of their dogs, it is neceſſary, in order to dry their fiſh, and other proviſions, that they ſhould have

7:Lesseps T-3 (1787-88)1790 Kamchadal

251/231 have a place ſheltered from the heat of the ſun, and at the ſame time perfectly expoſed to the air. Under the collonnades or ruſtic porticos, which form the lower part of their balagans, they find this convenience; and there they hang their fiſh, either to the ceiling or to the ſides, that it may be out of the reach of the voracioufneſs of their dogs. The Kamtſchadales make uſe of dogs* to draw their ſledges; the beſt, that is the moſt vicious, have no other kennel than what the portico of the balagans affords them, to the poſts of which they are tied. Such are the advantages reſulting from the ſingular mode of conſtructing the balagans, or ſummer habitations of the Kamtſchadales.

Thoſe of winter are leſs ſingular; and if

* As I ſhall ſoon be obliged to adopt this mode of travelling, I ſhall defer my deſcription of the dogs till that period.

equally

22: Guillemard T-2 (1882) 1886 Kamchadal

000 among them was no trace of Cook. Presently we came upon that imperturbable gentleman, placidly smoking a cigarette. He explained the matter in a few words:—"Very sorry, sir, but" (indicating the horse) "I've never been shipmates along o' one of them things before!"

133 136 501 We crossed the river in two dug-out canoes lashed together. These boats are as a rule small, and without attempt at elegance in shape, such as one sees in Borneo and other parts of the Malay Archipelago. Where the rivers are shallow, long poles are used to propel them, and indeed the natives always seem to prefer this implement to the paddle, wherever its use is possible. The Avatchā River is here about eighty yards in breadth; shallow for the most part, but with a centre channel about seven feet deep. It appeared 226 251 262 to be teeming with salmon. Stari-ostrog, situated on the right bank, consists of ten huts and a large number of fish-drying sheds. The long Kamschatkan winters, during which it is difficult to 361 procure food of any kind, and the consequent necessity of fish as an article of diet for almost every living creature in the settlements —the cows and horses even not excepted—create a need for a very large number of these buildings; and the consequence is that, to the eye of the new-comer, the villages appear very greatly larger than they really are. Scanty as the population of this wild country is, the amount of salmon annually consumed is absolutely enormous. At this little village, for instance, we were told that, during the season, 20,000 fish would be no uncommon catch for a single day! Here, however, owing to there being no other settlements higher up the river, they are permitted to stake the stream right across from bank to bank, and the number of fish thus obtained may probably be in excess of that in other places. The labour expended in gathering so abundant a harvest is, of course, very considerable, and during the season the inhabitants work day and night to get in a sufficient supply for the winter.

563 We were greeted by the headman and brought to his house, where we were regaled with milk, sour cream, coarse rye bread,

[Avacha--Analyst]

22: Guillemard T-2 (1882) 1886 Kamchadal

000 were to pay seven roubles each. The Ispravnik and the King had not done badly; their charge had been exactly quadruple!

226 251 In company with our English-speaking friend we went to inspect the fish. These were drying in open sheds, much as tobacco is dried in the Southern States of America. Split in half as far as the tail, cleaned, washed, and deprived of its head, the salmon is hung across a stick in company with fifty or sixty others. These sticks are then placed a few inches apart, with their ends resting upon other poles which run from end to end of the shed. The fish are thus freely exposed to the air, but protected from the sun. They are not hung lower than about eight feet from the ground, on account of the dogs, who are occasionally seen gazing at them with longing eyes and watering mouths, experiencing the tortures of Tantalus. Excepting for a sledge-dog, however, the sight is not a tempting one. Swarming with countless millions of maggots, which distil in a gentle but unceasing rain upon the ground beneath, whitening it as with a shower of powdery snow, the fish seem to be so rapidly disappearing that one wonders how any remain till winter. Another sense beside that of sight causes the same reflection, but neither the dogs nor their masters are particular as to these little matters. The latter, indeed, prefer their fish in an advanced stage of decomposition, and have the same method of preparing it as I have seen in some parts of Lapland. The salmon are buried for three or four months in pits, and any difficulty in extracting them at the end of that time is overcome by means of a ladle!

133 137 It was late in the afternoon before we were again *en route*, our course lying north-west through the valley of the river. This bears in many places distinct evidence of the latter having been, at some period, of very much larger size. We then ascended the bluff of the old left bank, and rode through an interminable forest of birch-trees, which were here larger than I have ever seen them elsewhere. Many of them must have been at least a hundred feet in height.

000 We began the next day with a more than usually exasperating

[Avacha--Analyst]

22: Guillemard T-2 (1882) 1886 Kamchadal

000 pretentious type, but possessed, nevertheless, of a quiet beauty so perfect in its kind that the most fastidious of critics would have sought no alteration. Below our camp the river clattered between its banks of yellowing birches towards some snow-capped mountains that distance had painted a deep violet. The village, grey, battered and weather-worn, as are all these northern hamlets, nestled at the foot of the three peculiar peaks of the eastern range of the valley. Not a human being was to be seen, and the smoke of our evening camp-fire rose like a straight blue pillar into a golden sky. Around us was a stillness that could be felt,—the wondrous silence of the North; and on the summit of the little cross above the church a crow sat motionless in the evening sun,—a speck of steely blue against the snow beyond.

132 251 343 361 Gunal, with its enormous stores of salmon, seemed, like all these Kamschatkan villages, a place of considerable size. A nearer acquaintance, however, soon dispelled the illusion, and we noticed that a large proportion of balagans seemed to be used as storehouses rather than dwellings. These buildings, which differ from the fish-sheds only in having a living-room at the top, and being consequently rather more solidly constructed, are rudely made of white poplar or birch trunks, pines being comparatively unknown in this part of the country. There are rarely more than two—at most three—tiers of fish drying beneath, for the sledge-dog is an active and ever-hungry animal, and six feet would be a dangerous height at which to suspend a salmon. The roof is high-pitched, and the thatch secured by means of light poles tied transversely across it. The entrance, a low door in the gable, is reached by a sort of ladder specially contrived for the humiliation of the unwary. It is merely a notched pole, placed loosely against the building, and not secured in any way; and the incautious European attempting the ascent is somewhat astonished to find the pole rapidly revolving, leaving him clinging back downwards
000 and discomfited. This simple arrangement, if capable of being put in action at will, might possibly be of considerable utility to those

27: Sauer--299 T-2 (1789-93) 1802 Kamchadal
251, 825

"The oil extracted from herrings is very pellucid and sweet; it preserves birds' eggs all the year quite fresh and good, as does also the oil of seals, whales, &c."

27: Sauer--312-313 T-2 (1789-93) 1802 Kamchadal
116, 221, 222, 251

"The Kamtshadals and residentiary Russians employ themselves during the summer in catching fish; drying some, and salting others for a winter supply for themselves and their dogs: in the autumn, in making hay for their cattle, collecting berries, the [313] sweet plant, and kiprey: the former is purchased by government for the distillery of brandy, at three and four roubles the pood when prepared and dried. In the spring they collect birds' eggs about the marshes, and particularly among the rocks at the mouth of the bay of Avatsha: these they preserve all the year with oil."

29:Cochrane T-2 (1821-22) 1824 Kamchadal

132 bages never come to a head, and peas only flower;
137 but turnips and radishes thrive amazingly. Grass of the most nutritious quality is found in the greatest abundance, as well in the numerous meadows as in the forests. It grows to the height of between five and six feet, and in some places three crops are produced within the year.

132 Winter may be said to occupy near one half of the year, spring and summer the other half. The winters are mild when compared to those of Siberia; the thermometer never descending, in the southern parts of the Peninsula, below 20° of Reaumur, and seldom below 12° and 15°. Spring is the most agreeable time, just when the leaves put forth, and it is then the fishing commences. The summer is the most disagreeable portion of the year, owing to the heavy rains and heavier fogs which come from the eternally snow-clad mountains. The greatest heat is in July, when the thermometer is at 27° and 28°. The snow lying upon the ground seven and eight months will sufficiently account for the want of cultivation, but indeed the remaining four can hardly be considered as equal to more than two months in other places; for the sun at St. Peter and St. Paul's has no effect upon the earth during more than four hours of the day, and from the immense height of the mountains, it is only from ten o'clock until two that any heat is felt.

251 This absence of heat, and these changes of climate, with the very heavy fogs, which account for

29:Cochrane T-2 (1821-22) 1824 Kamchadal

251 the sterility of the soil, operate also to prevent
263 the inhabitants from laying in a sufficient store of
439 winter provisions, which as they consist of fish are exposed to the air to dry, and in a short time become so rotten and maggotty, that but a small quantity can be made serviceable for the consumption of the people; the rest is retained for the dogs. Salt is at present issued, but not in sufficient quantities; were that article more liberally distributed, the people might in some years prepare fish to last them several successive ones. From the quantity now supplied by the king of the Sandwich islands, it is to be hoped that the first productive season will be taken advantage of.

137 Of wild vegetables, some of which are mixed
262 with the bark of trees for the fare of the inhabit-
439 ants, there is an abundance in Kamtchatka, and there is no doubt that greens, turnips, and radishes might with a little trouble be every where produced. Wild berries and wild garlick abound; the latter is exported to Okotsk and Yakutsk: this plant is one of the finest antiscorbutics known, but has a peculiarly offensive smell.

136 The principal riches of Kamtchatka may be said to consist in the animals of the chase, of which there are so prodigious a number, that there are not sufficient inhabitants to take them. The most valuable are foxes of various colours, a few sea and more river otters, with an immense number of sables. Bears, wolves, rein-deer and mountain-

29:Cochrane T-2(1821-22)1824 Kamchadal

136 sheep, and sometimes a few lynxes, are also to be
438 found. The number of skins annually exported
439 and consumed in the peninsula is about thirty thousand, of which sables and foxes form the principal part. The sables are considered at once the warmest and the coarsest known; the foxes however, especially the fiery red, are of the finest spe-
231 cies. Next to these furs, the dogs of Kamtchatka may be considered as forming a great part of their riches. These faithful and useful animals, are employed to transport fish, supply the house with water, the cattle with hay,—in short to do all the work that horses perform in England. They are fed as circumstances may dictate, being always left to shift for themselves from June to October. They are of a coarse appearance, in shape resembling a common house-dog, but endued with great sagacity, and it is to be regretted that they are not relieved a little by the importation of horses.

136 Independent of fish and wild animals, the Kamtchatdales derive also a considerable benefit from the surprising quantities of geese, ducks, swans,
251 snipes, and wild cocks. They are preserved by
262 dipping them in water, which freezing, they will be good as long as winter continues; at other times they are salted. The ducks and snipes are most excellent; but the geese, swans, and wild sheep are considered venison, and of the most delicious kind too, by those who are termed epicures; for myself although I have frequently partaken of them,

29:Cochrane T-2 (1821-22) 824 Kamchadal

251 I never could relish their flesh. The Kamtchatdales
262 also derive great benefit from the whales which are
825 numerous, and which being encountered by the Kasatka, for the sake of the tongue, as is supposed, are killed and cast ashore. Upon the whole, therefore, there are no people at whose disposition Providence has placed more of the necessaries of life, than the inhabitants of Kamtchatka. For their direct subsistence, they have fish, flesh, and fowl, wild berries and roots in great variety and abundance, sufficient doubtless to maintain a large population; while for clothing, they have immense quantities of furs of the warmest and most durable kind;
137 and for firing and building, wood is every where to be had in the utmost profusion.

181 Such being the case, it becomes a matter of spe-
433 culation, what could induce the aborigines to live in that filthy and famished condition which formerly characterized them. Was it from an over abundant population, or the want of means to possess themselves of food—such as guns, nets and traps? That they had means to entrap game and fish for a certain proportion of the inhabitants there can be no doubt, but whether sufficient for a large population is very questionable.

157 Of the people in general, I can only say they are
177 as amiable and honest as ever. They are now esta-
221 blished in villages all built in the old Russian style, which are clean and comfortable. During the summer or fishing season, they leave their winter resi-